15

20

Claims:

- A printer comprising:
- a physical printer mechanism capable of producing printed images on a print media;

an electronic data processing means capable of controlling said physical print mechanism;

a bi-directional communications port capable of sending and receiving data;

a preview generation means for generating, by said printer, a print preview data, and

a server means, configured as part of said printer, capable of presenting said preview data in page format readable via said bi-directional communications port.

- The printer device as claimed in claim 1, wherein said preview image is displayed in a form which visually represents an image of a print job in a form as printed taking into account individual printer settings of said printer device.
- 3. The printer device as claimed in claim 1, wherein said preview image is displayed in a form which visually represents an image of a print job in a form as printed taking into account settings of said printer device selected from the set:

30 font type;

font size:

10

15

20

25

page margins;

print media dimensions:

appropriate color conversion depending on media type characters.

- 4. The printer device as claimed claim 1, wherein said page data is presented in a form readable by a browser (217).
- The printer device as claimed in claim 1, wherein said preview image data is presented in the form of an HTML Page.
- The printer as claimed in claim 1, wherein said printer operates to store a print job in a print queue, said print job stored in said queue having a URL address stored within said printer said address comprising:

a printer address;

a job name data; and

a timestamp data.

7. A system of networked computer entities comprising:

a plurality of printer devices; and

- a plurality of client computer devices, each having a user interface having a visual display unit;
- 30 wherein:

10

15

20

25

30

each one of said plurality of printer devices comprises a physical printer mechanism, at least one communications port, a control means for controlling said ports and said printer mechanism, a preview generation means for generating a preview image data of a print job, and a server means capable of generating a page viewable via said port; and

each said client computer device comprises:

at least one processor, an operating system, at least one communications port for communicating said client computer device with a said printer device, a user interface having a visual display unit, a driver means for driving a said printer device, and a browser means for browsing a page display on a said printer device.

- 8. The system as claimed in claim 7, wherein said browser device is capable of browsing a page image of a print preview, said page image displaying a preview image which is a true image representation of a print image in a form in which it may be printed by a said printer device, taking into account the specific settings of that printer.
- 9. The system as claimed in claim 7 wherein said user interface is arranged to send a print command to said printer to print a print image in a same format as identified by a said print preview on said visual display unit.
- 10. A method of generating a preview image for preview of a print job to be printed by a printer, said method comprising the steps of:

receiving a print job;

requesting a preview of said print job;

15

20

25

rendering said image data of said print job to generate a rendered image file; and

- configuring said printer to generate a preview image from a rendered image 5 taking into account specific settings and printer characteristics.
 - 11. The method as claimed in claim 10, further comprising the steps of:

registering said printer image file as a resource in a web server;

presenting said preview as a web page.

- 12. The method as claimed in claim 10, wherein said preview page contains a preview image data of a print job in a form for printing said print job on said printer, taking into account local settings and capabilities of said printer device.
- The method as claimed in claim 10, wherein said print job comprises;

a job name data.

14. The method as claimed in claim 10, wherein said print job comprises:

a timestamp data.

15. The method as claimed in claim 10, wherein said local printer settings are selected from the set comprising:

font settings;

30

margin settings; rendering settings; 5 print media size and type settings; color settings; and internal printer settings. 10 16. The method as claimed in claim 10, further comprising the step of: displaying a generic page informing of progress of a preview page 15 compilation. 17. The method as claimed in claim 10, comprising: receiving a request to said web server in a HTTP format, said request 20 specifying: a printer address; and a job identification data. 25 18.

The method as claimed in claim 10, further comprising the step of: sending a pause signal with said print job to pause printing.

19. The method as claimed in claim 10, further comprising the step of: sending a print signal to override a paused condition of said print job.

15

20

25

20. A printer for printing images, said printer comprising:

a printer mechanism; and

5

a preview generation means for generating a preview image of said print job;

wherein said preview generation means operates to preview said print job in a form substantially identical to a form in which said print job will be printed by said printer mechanism.

- 21. The printer as claimed in claim 20, wherein said preview means comprises:
 - a raster image processor for rendering said print job; and
 - a web server configured to serve said preview image.
- 22. The printer as claimed in claim 20, further comprising a driver means for sending a print job to said printer mechanism wherein said driver sends a pause command, for pausing said printer mechanism, awaiting a confirmation signal for proceeding with printing said print job.
- 23. The printer as claimed in claim 20, wherein said preview generation image is generated as a relatively low resolution image compared to a printed image with said printer mechanism.
- 24. The printer as claimed in claim 20, wherein said preview generation means is provided with a bi-directional communications link for sending and receiving communications with said printer mechanism.

10

15

20

25

30

25. A printer comprising:

a physical printer mechanism capable of producing printed images on a print media;

an electronic data processing means capable of controlling said physical print mechanism;

a bi-directional communications port capable of sending and receiving data;

data,

a preview generation means for generating, by said printer, a print preview data displayable in a form which visually represents an image of a print job in a form as would actually be printed taking into account local printer settings of said printer, and

a server means, configured as part of said printer, capable of presenting said preview data in HTML page format said preview data being readable via said bi-directional communications port by a browser.

- 26. A printer as claimed in claim 25, wherein said preview generation means generates said preview data utilising an embedded raster image processor (RIP) within said printer, the preview data being made available to a web browser of a client computer by said server means.
- 27. A method of generating a preview image for preview of a print job to be printed by a printer, said method comprising the steps of:

receiving a print job in electronic form via an input/output port;

receiving a request for a preview of said print job from a browser on a client computer which is in communication with said printer;

10

15

20

25

in a data repository in said printer storing data describing printer settings, said data comprising data from the set of font types, font size, ink colour, ink availability, margin types and page layout which are specific to the set up of said printer:

directing said browser request to a web server module in said printer;

configuring a page description language interpreter module to render image data of said print job and thereby generate a rendered image file; and

configuring said printer to generate a preview image from said rendered image taking into account said stored specific settings and printer characteristics so that a J-PEG format image is created that substantially exactly reflects the preview of the image that will be printed.

28. A method of generating a preview image for preview of a print job to be printed by a printer, said method comprising the steps of:

receiving a print job in electronic form via an input/output port;

receiving a request for a preview of said print job from a browser on a client computer which is in communication with said printer;

rendering said image data of said print job to generate a rendered image file registered as a resource in a web server; and

configuring said printer to generate said preview image from said rendered image taking into account specific settings and printer characteristics, said preview image being configurable for presentation as a web page.